MCH Data Brief

March 2013

Kentucky Department for Public Health, Division of Maternal & Child Health

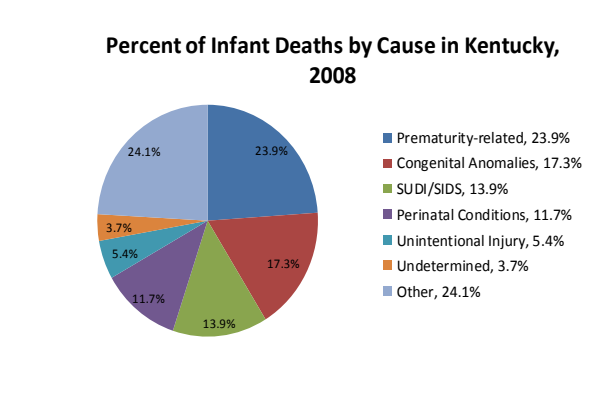
Birth Defects

Birth defects are conditions that are present at the time of birth that cause structural changes in one or many parts of the body. It is estimated that one in every 33 infants, or 3%, have birth defects.[1] Many birth defects are not life-threatening. Birth defects are a leading cause of infant mortality and lifelong disabilities. The hospital costs for those admitted principally for the treatment of birth defects totaled $2.6 billion in 2004.[2]

Every 4½ Minutes a Baby is Born with a Birth Defect[1]

Kentucky Data

- Birth defects have been a leading cause of infant mortality in Kentucky for decades.
- In 2008, 17.3% of all infant deaths were due to congenital anomalies.
- From 2005 to 2009, Kentucky deaths in children 0-17 years from congenital heart defects was 3.4 deaths per 100,000 live births while the national rate was 1.1 deaths per 100,000 live births.



Data Source: Kentucky Death Certificate Files, 2008

Congenital heart defects (CHD) affect 1 in every 100 babies born in the United States each year and account for nearly 30% of infant deaths due to birth defects.

Approximately 17-33% of CHD are Critical Congenital Heart Defects (CCHD).

While many infants with CHD are identified by prenatal ultrasound, 50% of infants with CCHD are discovered after birth.

Unfortunately, a seemingly normal infant can suddenly experience serious or life-threatening complications within the first few days or weeks of life and require emergency care.

CCHD Added to Newborn Screening Panel

- A new screening technology, pulse oximetry testing, is being added to the panel of newborn screening tests in Kentucky for identification of CCHD. It is already being piloted in several hospitals in Kentucky.
- Based on national estimates, Kentucky estimates that **65** infants could be identified with these serious heart conditions each year before they are discharged from the hospital.

The Kentucky Birth Surveillance Registry (KBSR) is a statewide system to identify children up to the age of five years with birth defects. KBSR activities include:

- Using Kentucky specific data to evaluate possible clusters of birth defects.
- Providing data to the Centers for Disease Control and Prevention to assist in the development of national estimates for specific birth defects.
- Developed a system to refer children identified with birth defects that have an increased risk of developmental delay to early intervention services.
- Participates in prevention strategies including folic acid activities for the prevention of neural tube defects.

KBSR
KENTUCKY BIRTH SURVEILLANCE REGISTRY

Kentucky FOLIC ACID Partnership
...Promoting Perinatal Health

- Neural Tube Defects are serious birth defects of the brain and spine. They include the conditions of anencephaly, spina bifida and encephalocele.
- The consumption of 400 mcg of folic acid every day will reduce the occurrence of these serious birth defects. Women should take folic acid for at least three months prior to getting pregnant and throughout the entire pregnancy.
- Neural tube defects have been decreasing in Kentucky. In 2004, the incidence rate of neural tube defects was 6.5 per 10,000 live and stillbirths in Kentucky. Through prevention activities with partners including the Kentucky Folic Acid Partnership, the incidence of neural tube defects decreased to 5.48 per 10,000 live and stillbirths in 2009.

Strategies to Reduce the Risk for Birth Defects

◊ All women of childbearing age should take 400 micrograms (mcg) of folic acid every day
◊ Don't drink alcohol or use street drugs during pregnancy
◊ Don't smoke
◊ Talk to a health care provider about taking any medications
◊ Prevent infections during pregnancy
◊ Talk to your doctor about vaccinations
◊ Keep diabetes under control
◊ Reach and maintain a healthy weight

References
[1]Centers for Disease Control and Prevention. Facts about Birth Defects. Retrieved February 20, 2013 from http://www.cdc.gov/ncbddd/birthdefects/facts.html.
[2]Russo, CA and Elixhauser, A. (2007) Hospitalizations for Birth Defects, 2004. Retrieved February 20, 2013 from http://www.hcup-us.ahrq.gov/reports/statbriefs/sb24.pdf.